

Figure 1

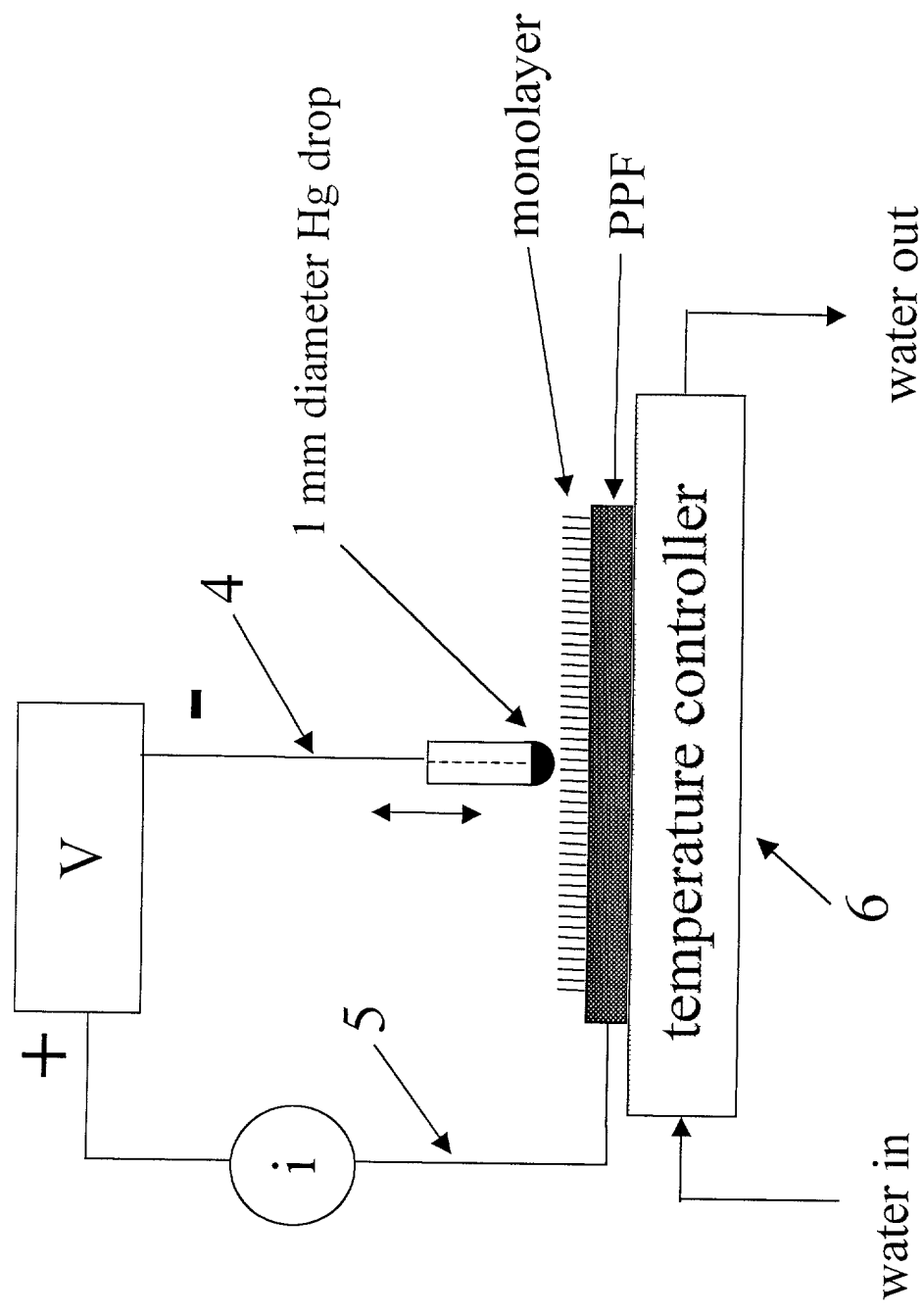


Figure 1A

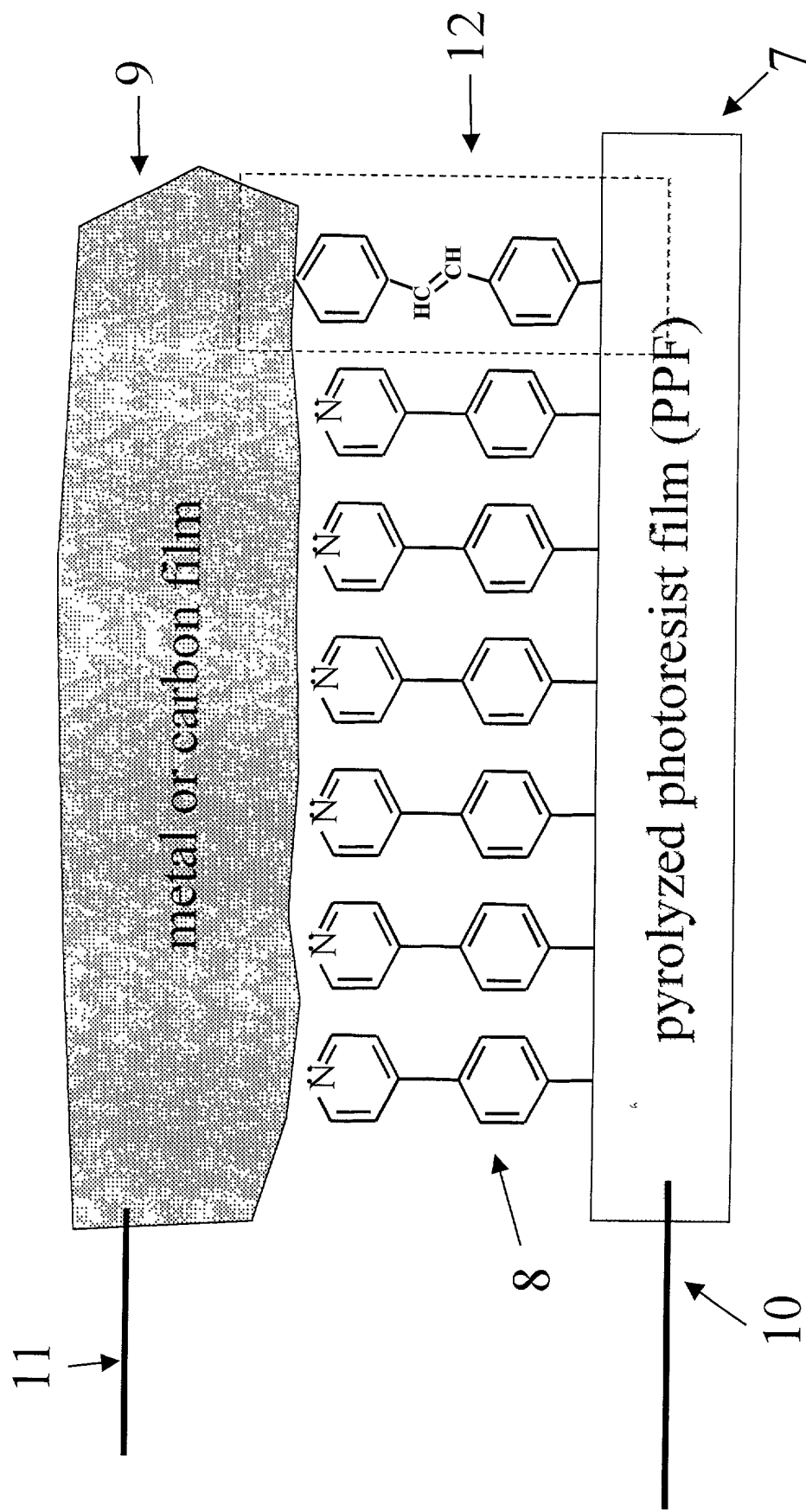


Figure 2

Schematic molecular orbitals of individual components of molecular junction

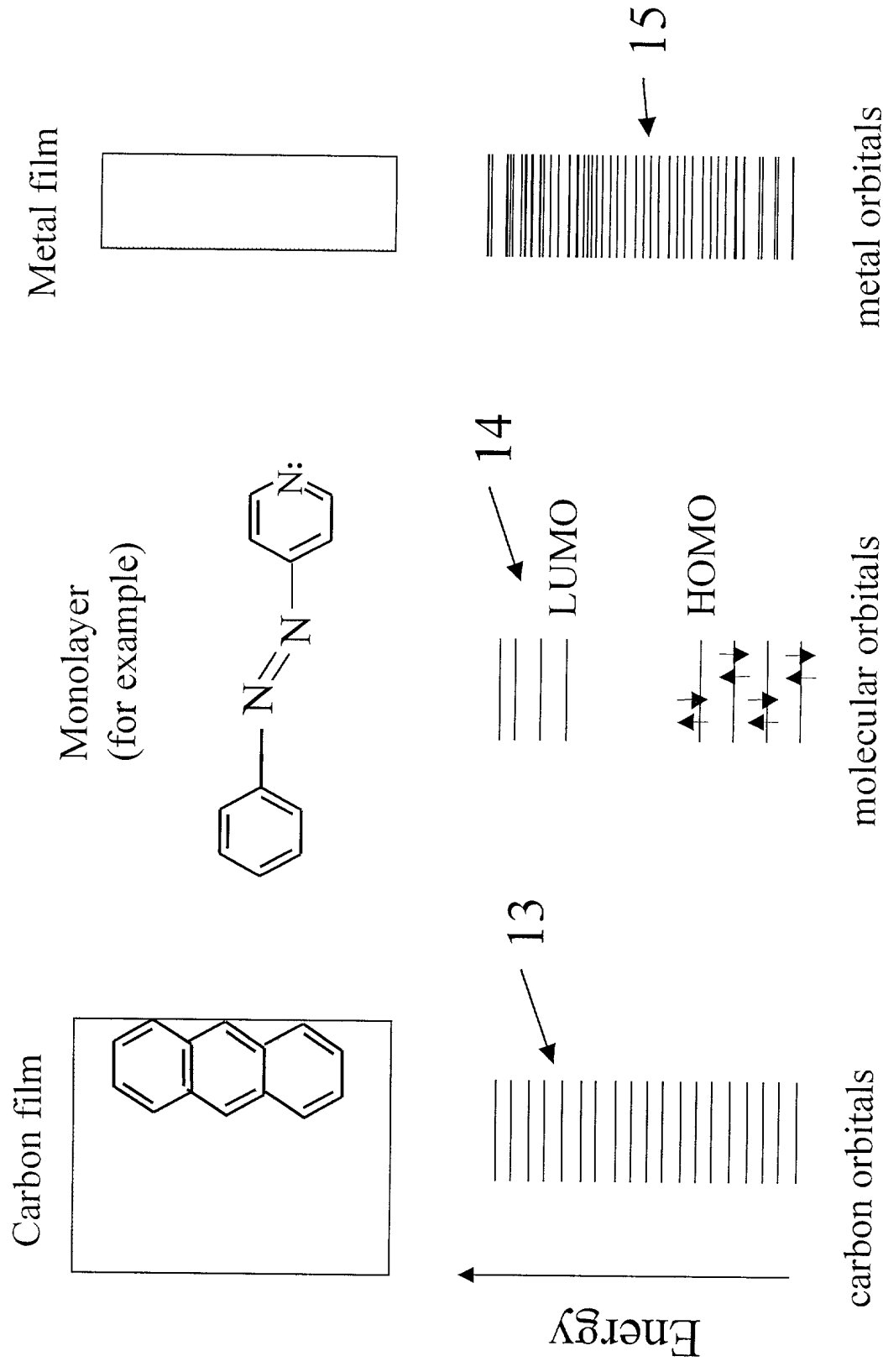


Figure 3

Chemically bonded organic monolayer on PPF:

metal film

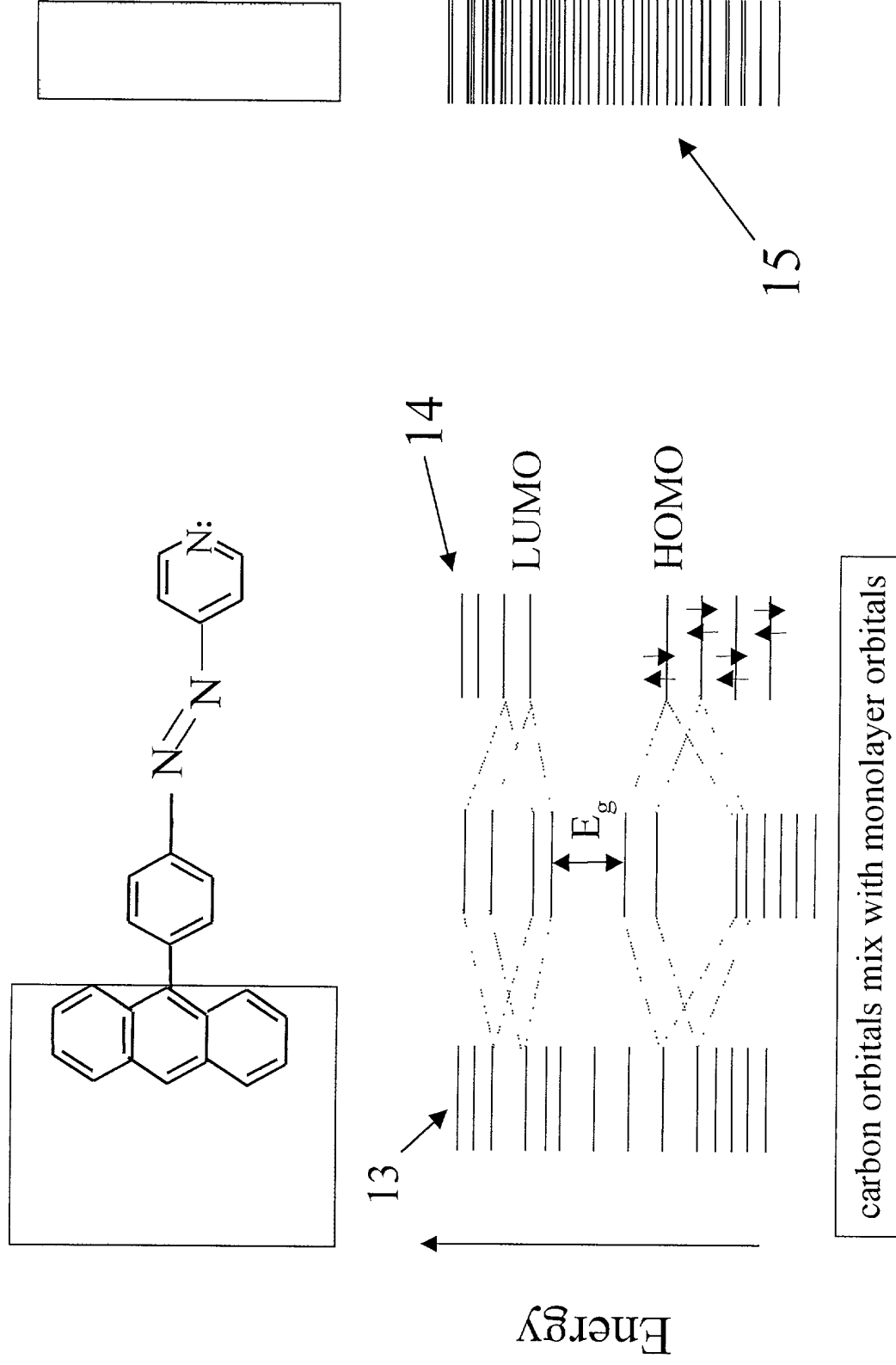


Figure 4

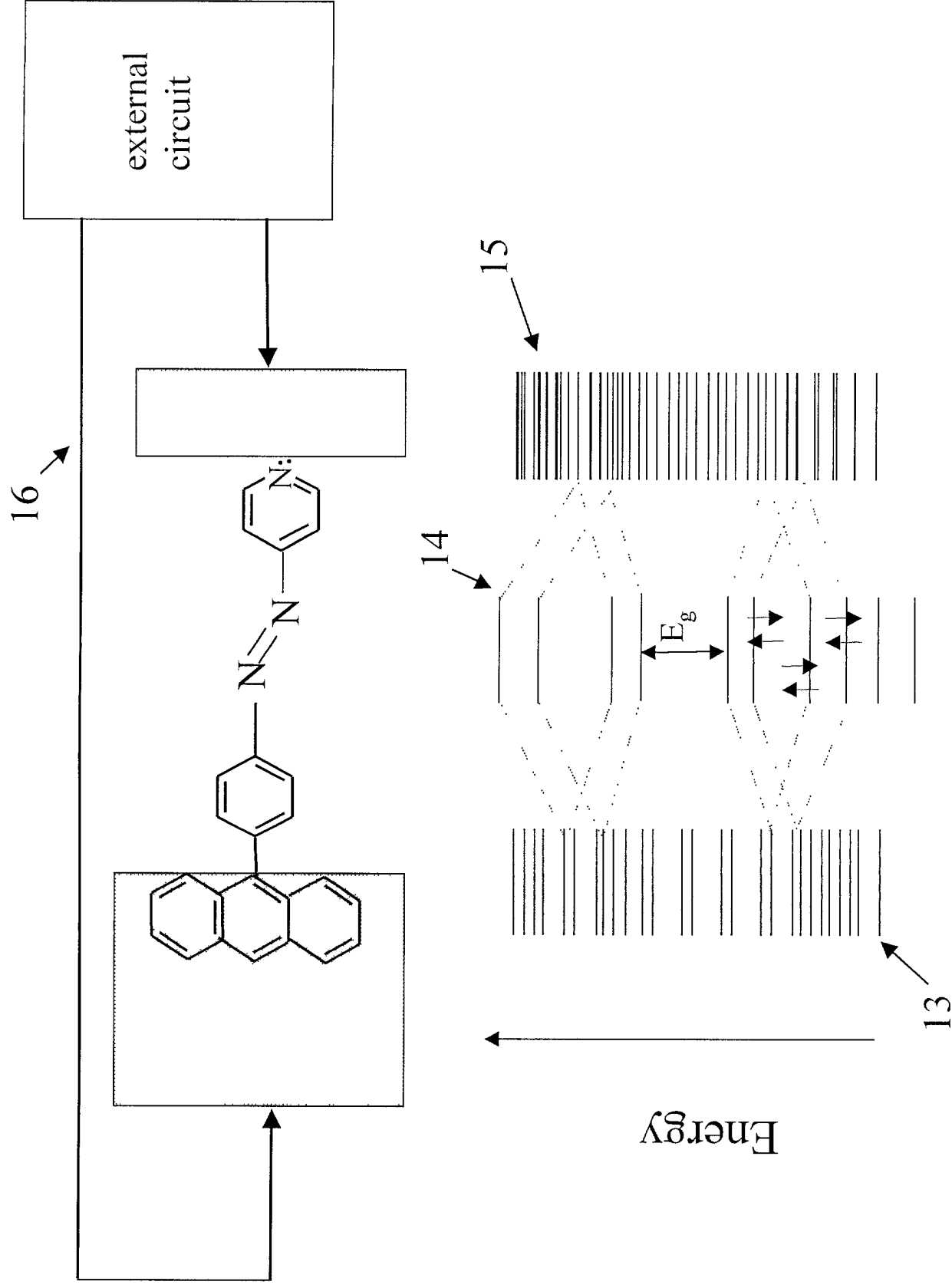
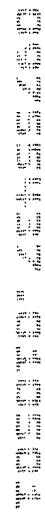


Figure 5

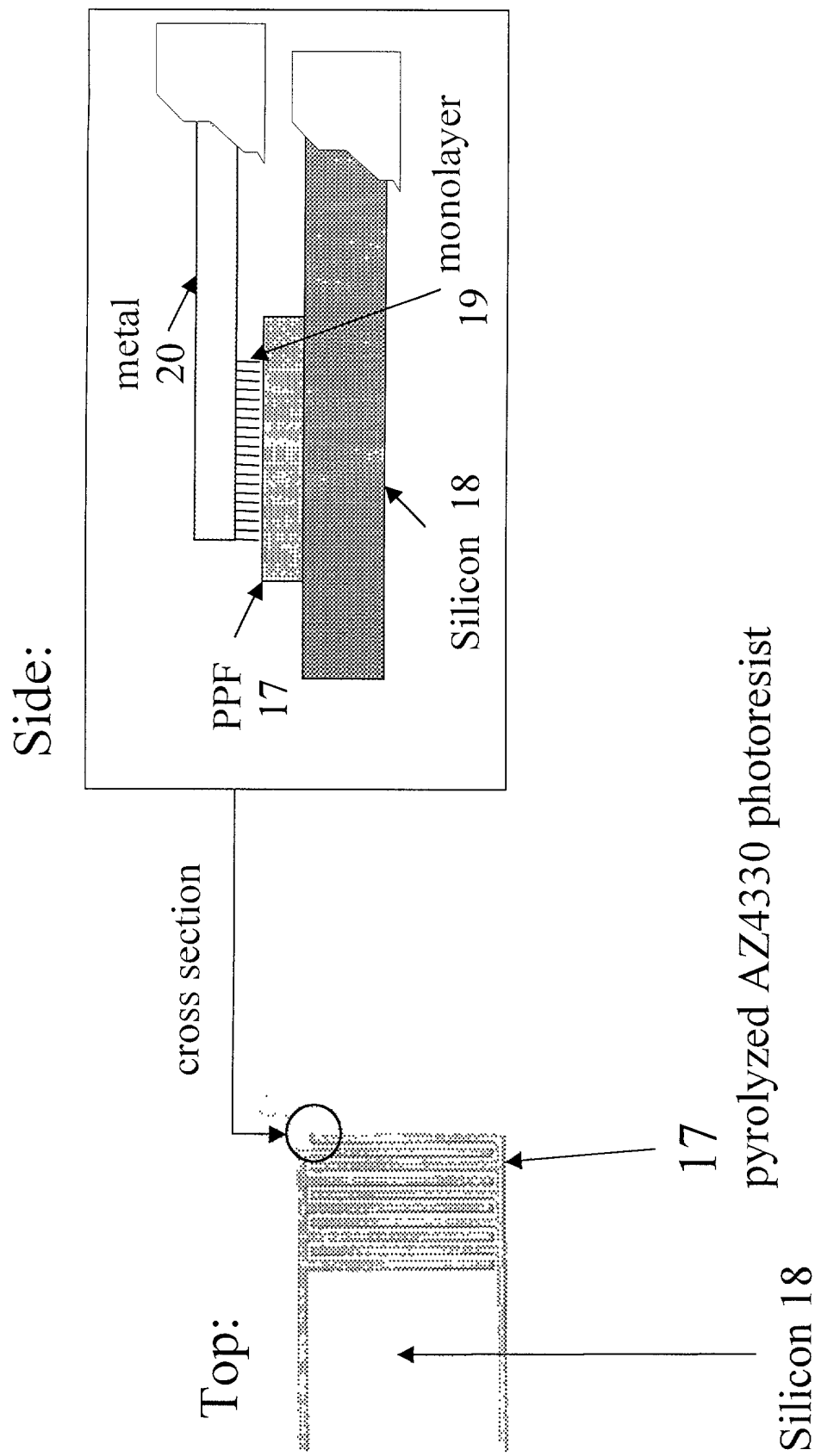
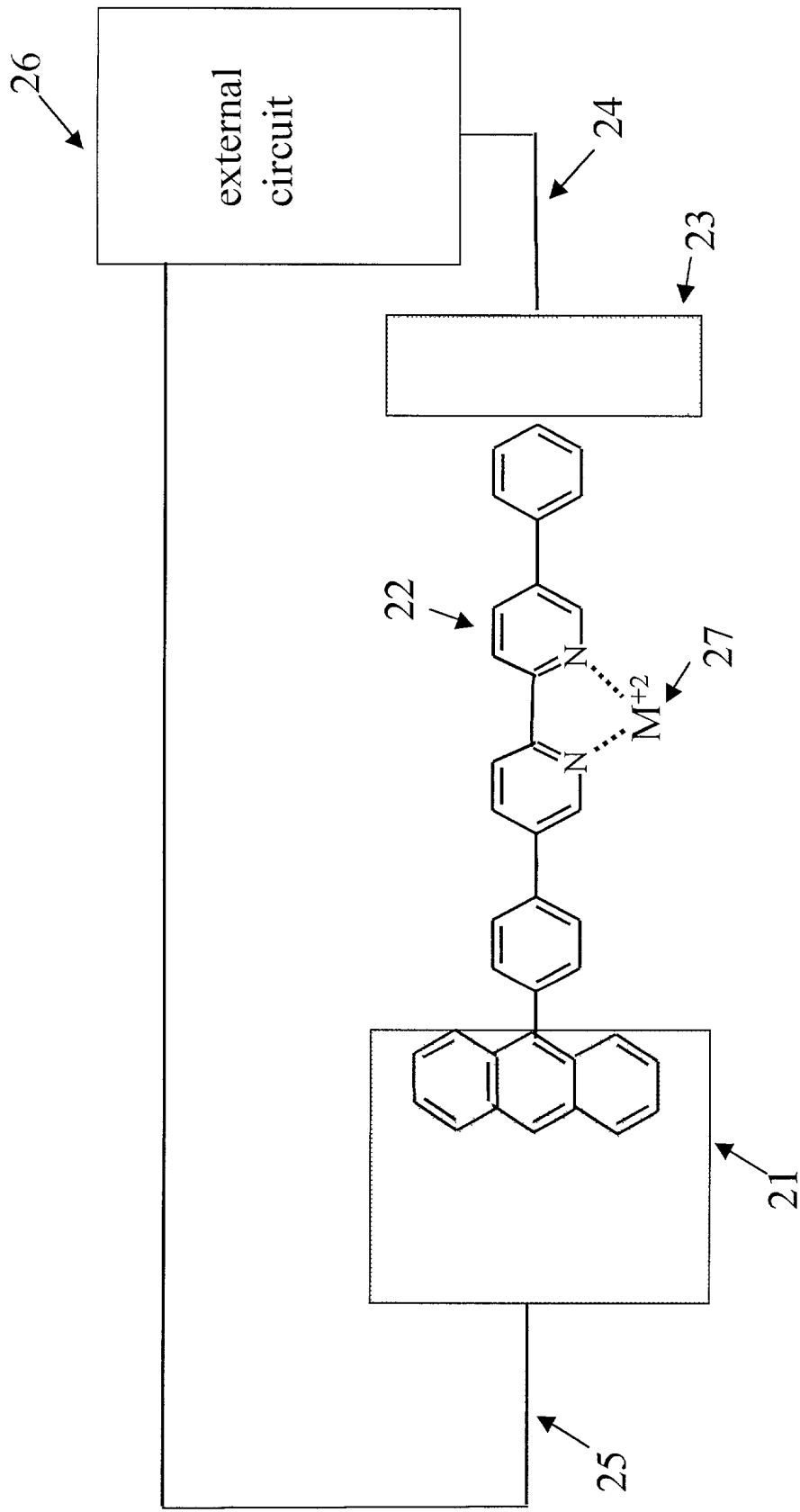


Figure 6



Presence of metal ion changes conductivity between carbon and metal films. Chemically sensitive component becomes part of the circuit.

Figure 7

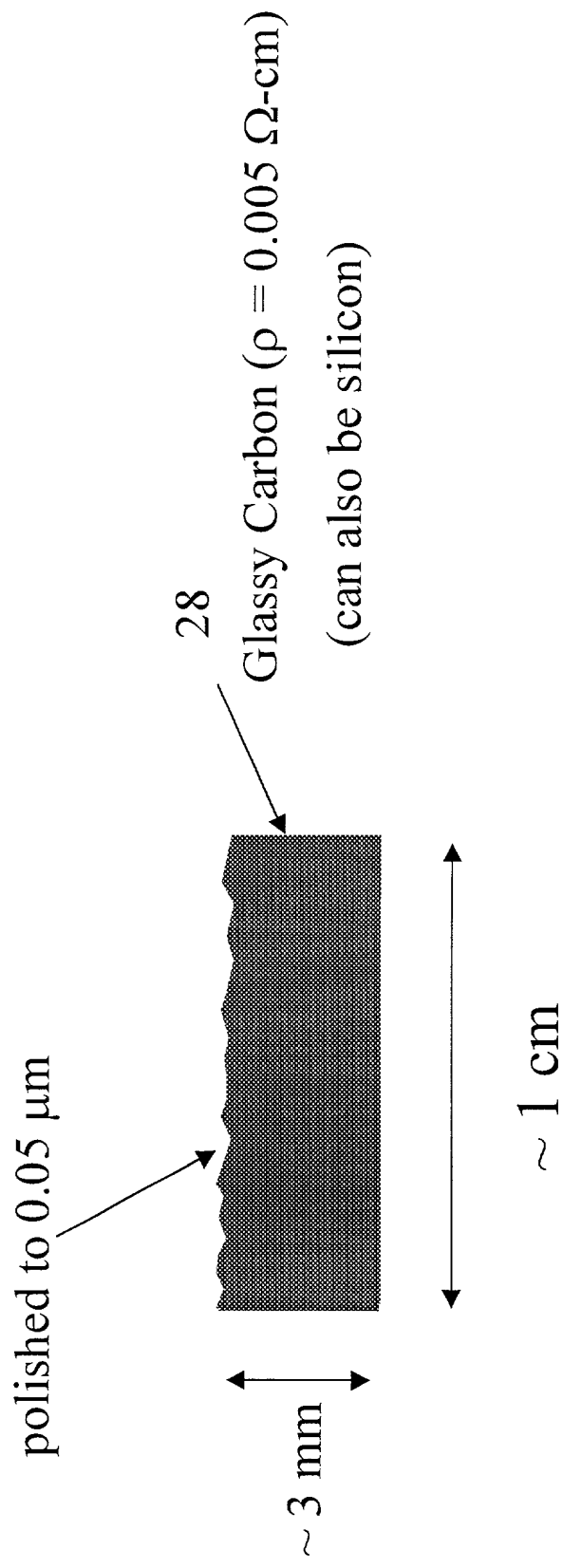
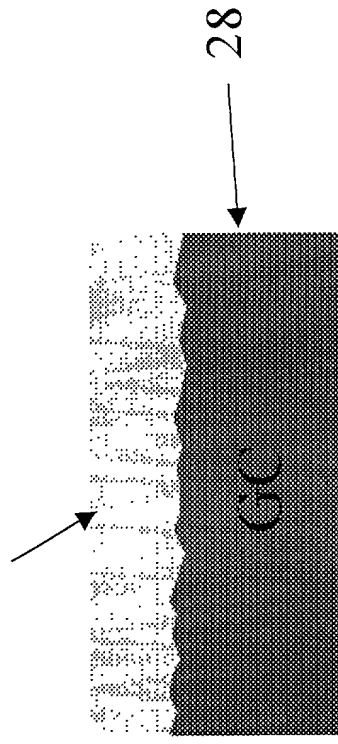


Figure 8

29 positive photoresist (AZ4330, Hoechst)



1000 °C, H₂/N₂ atmosphere

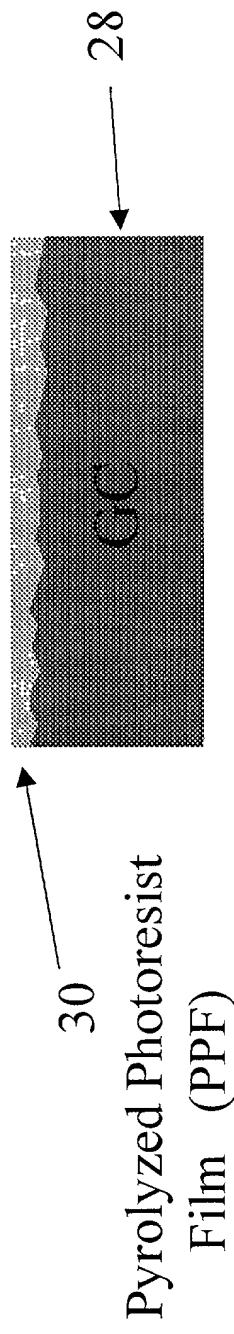


Figure 9

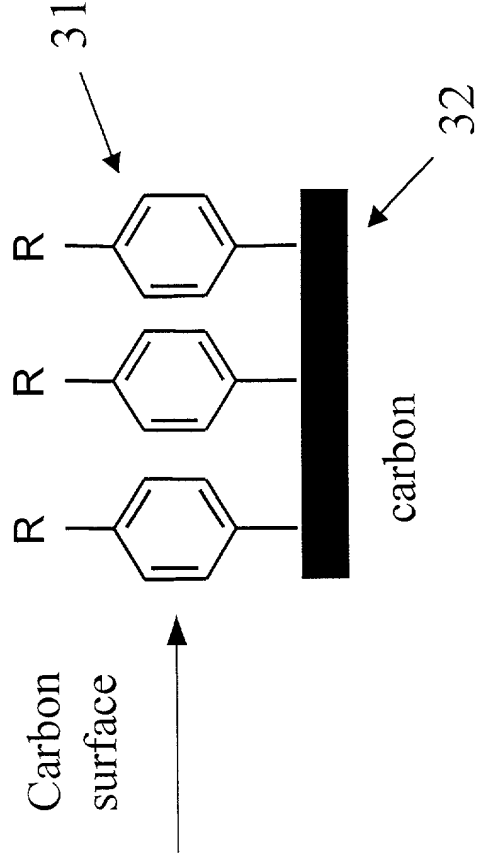
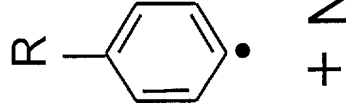
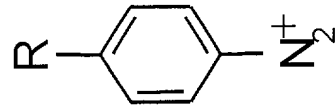


Figure 10

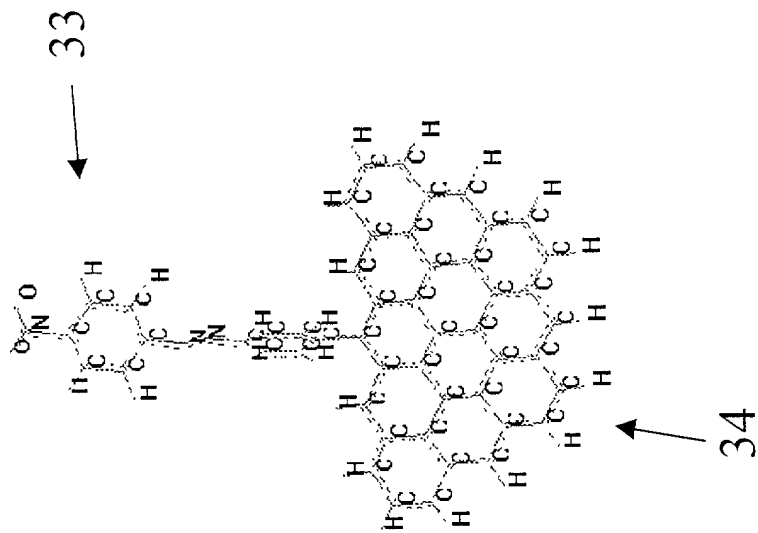
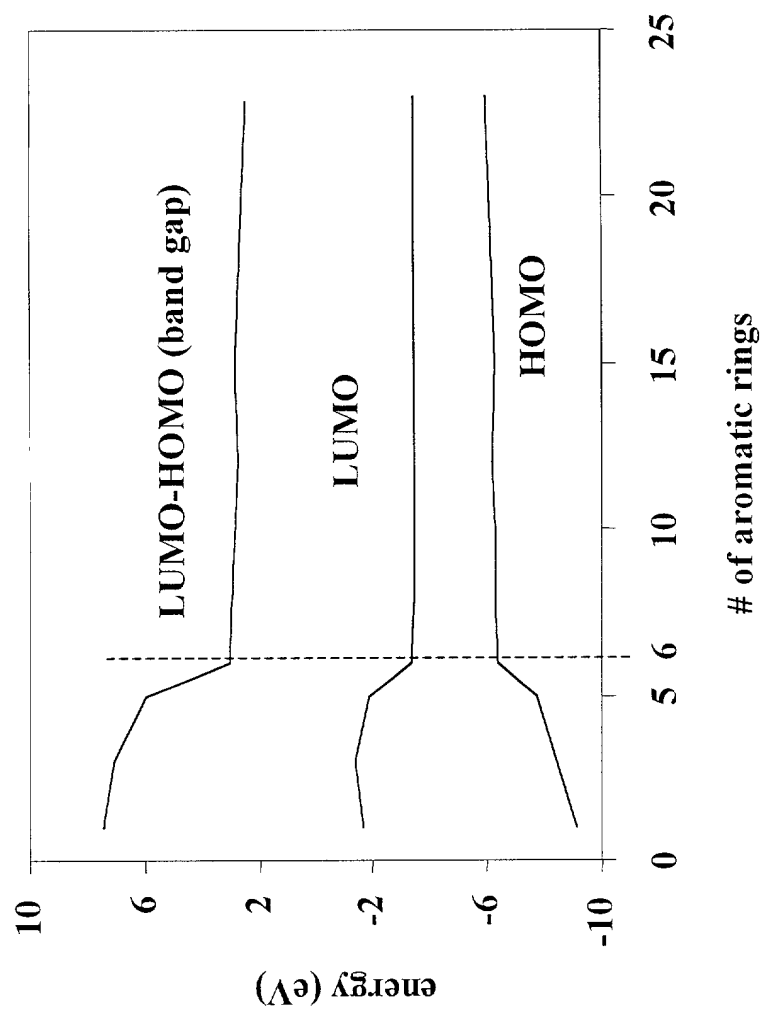


Figure 11

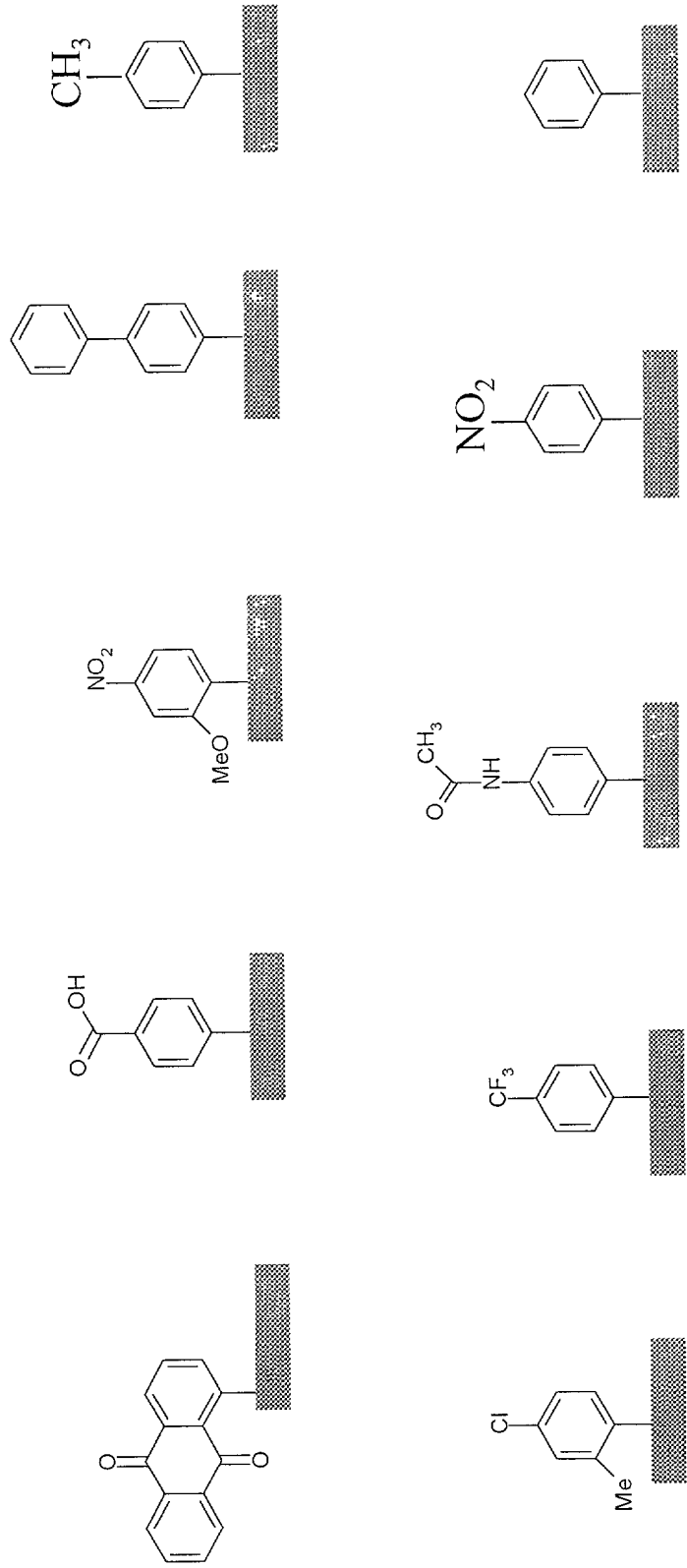


Figure 12

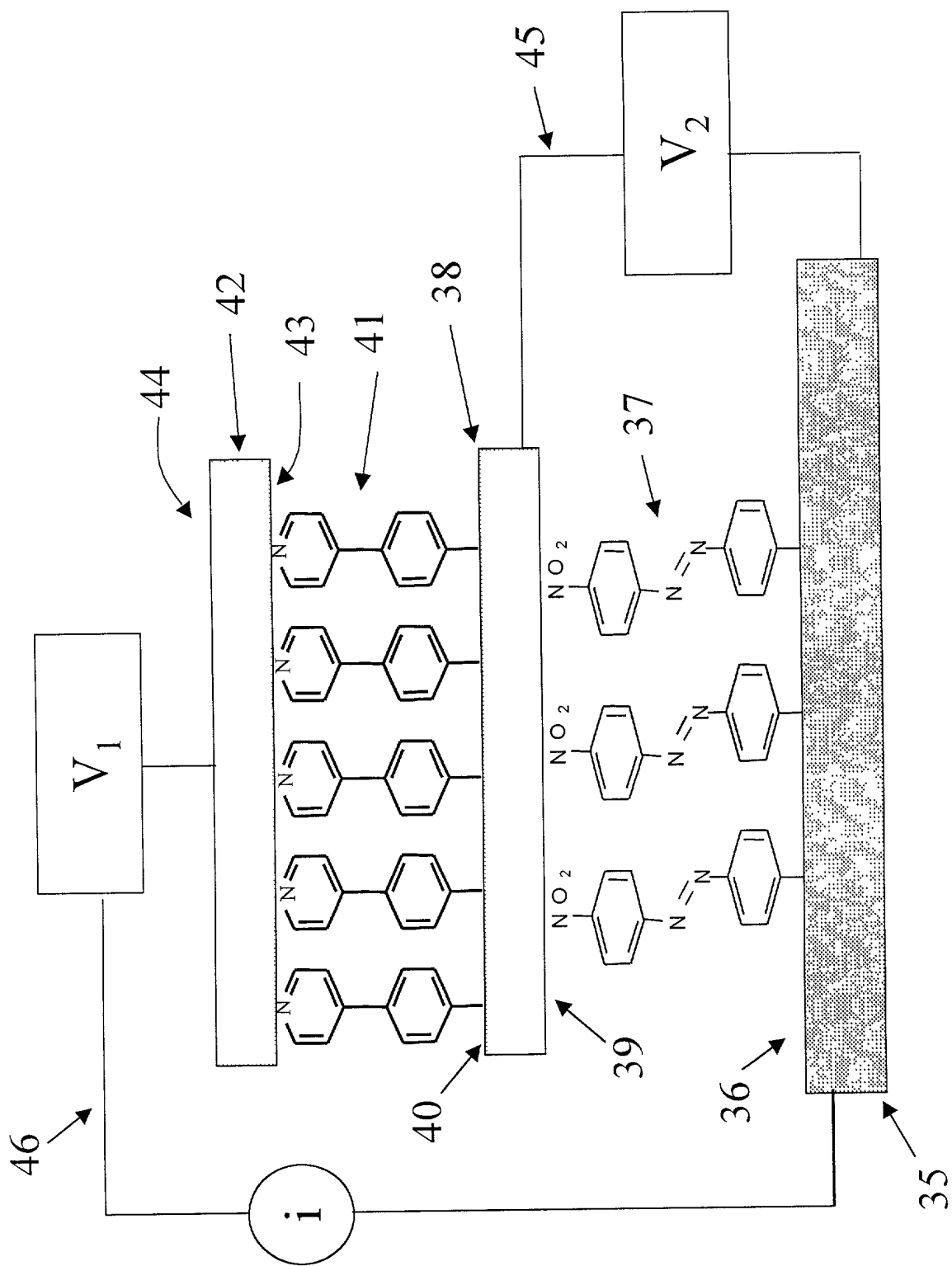


Figure 13

Figure 14: Cyclic voltammogram of the polymer film on the electrode.

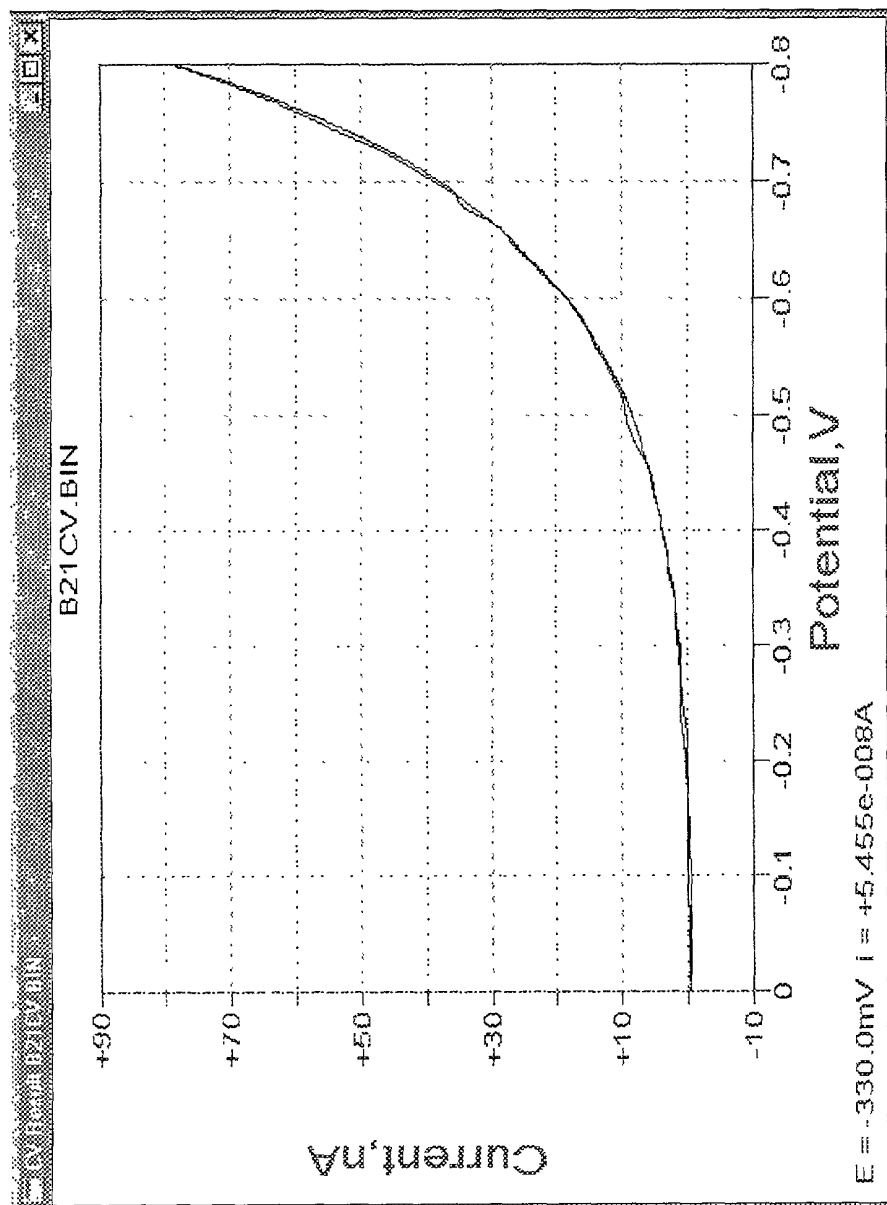


Figure 14

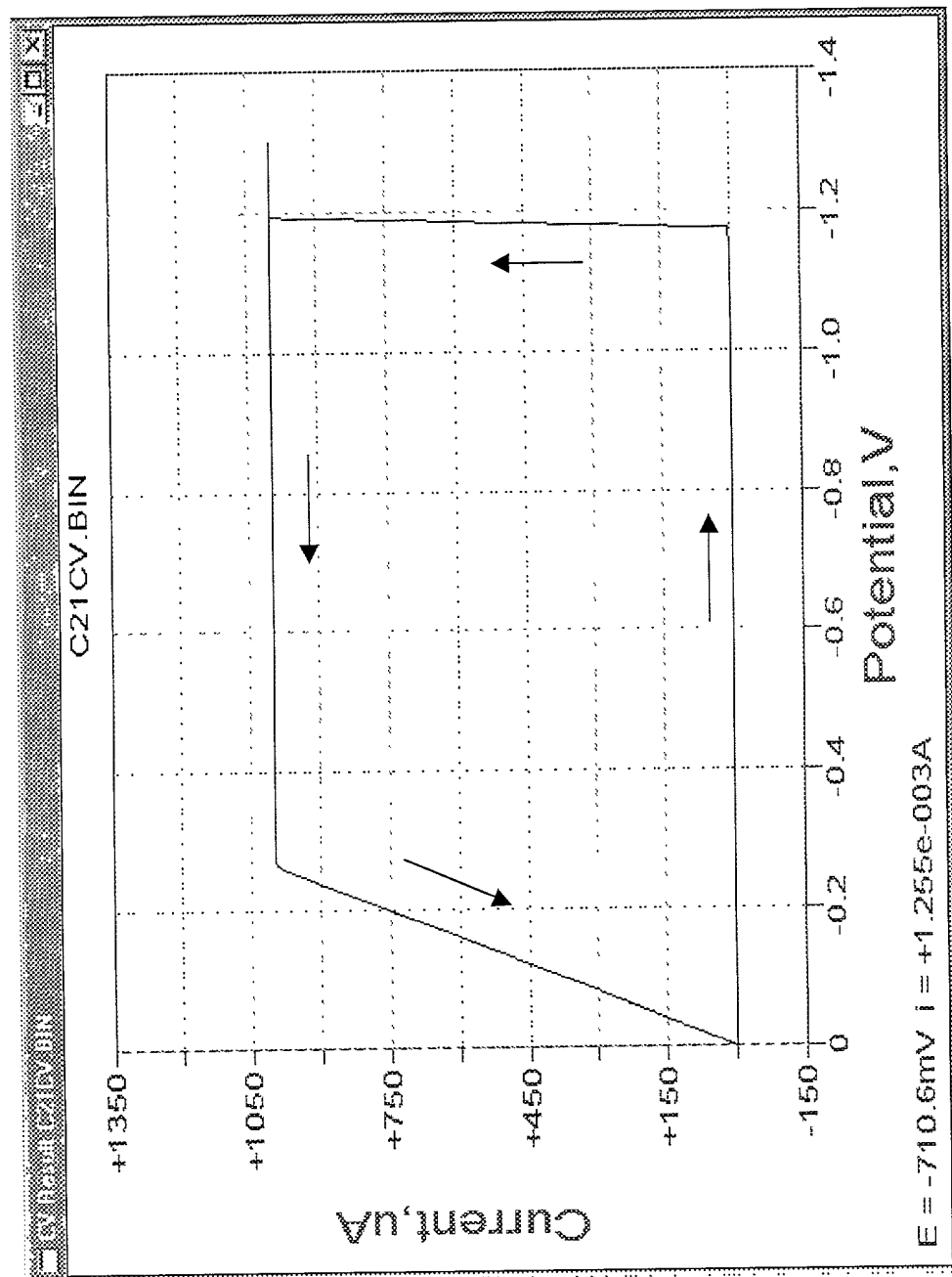


Figure 15

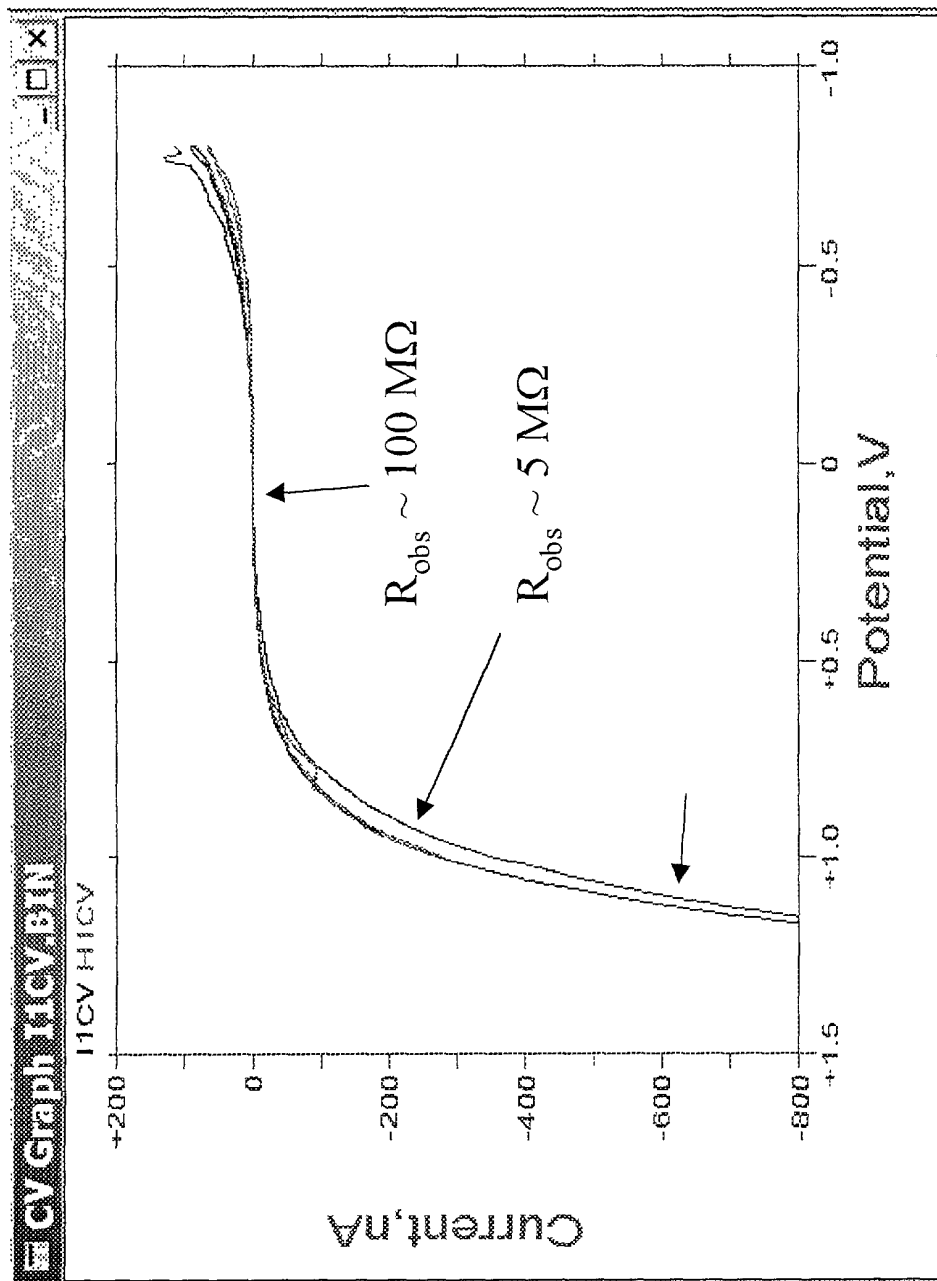


Figure 16

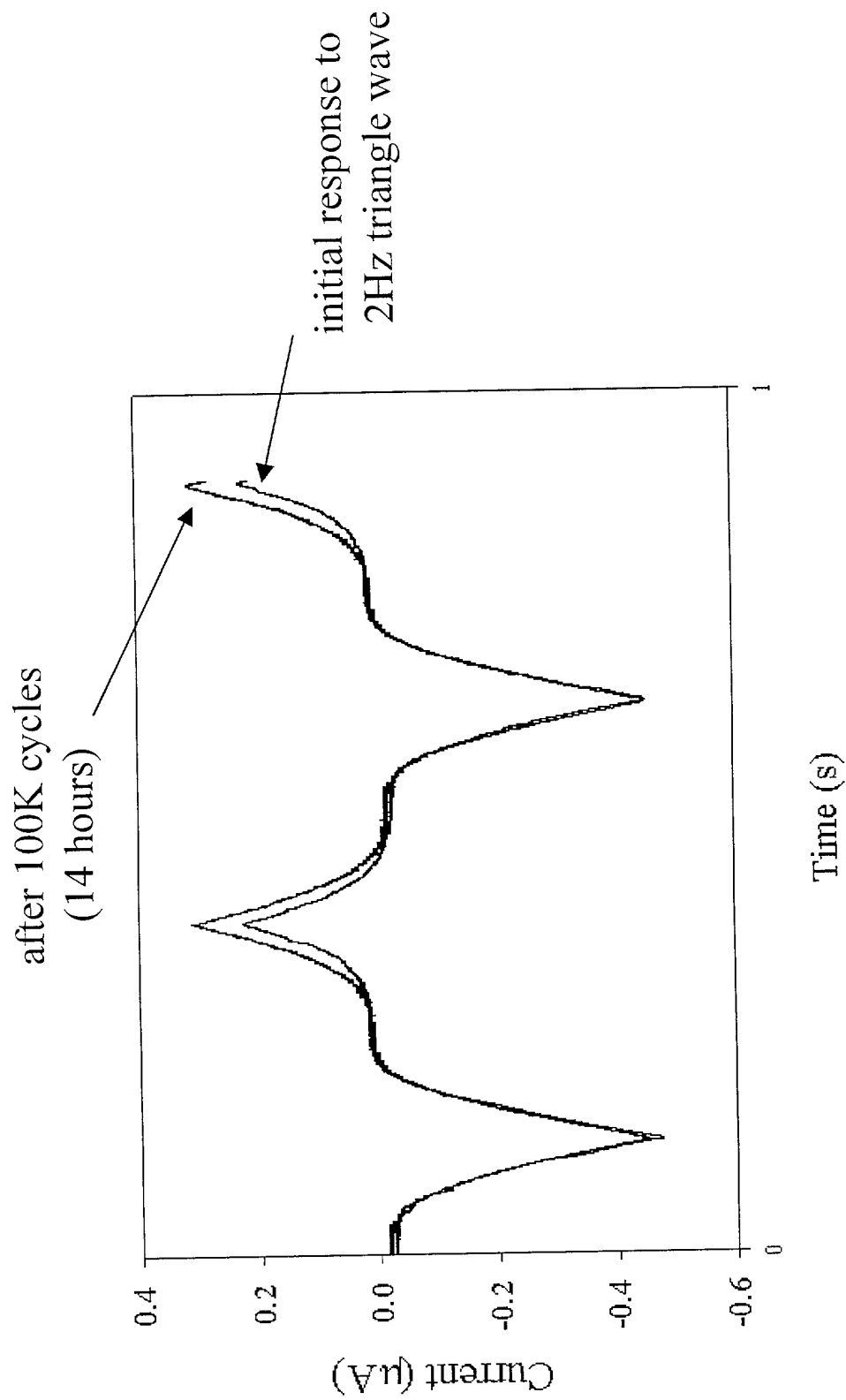


Figure 17

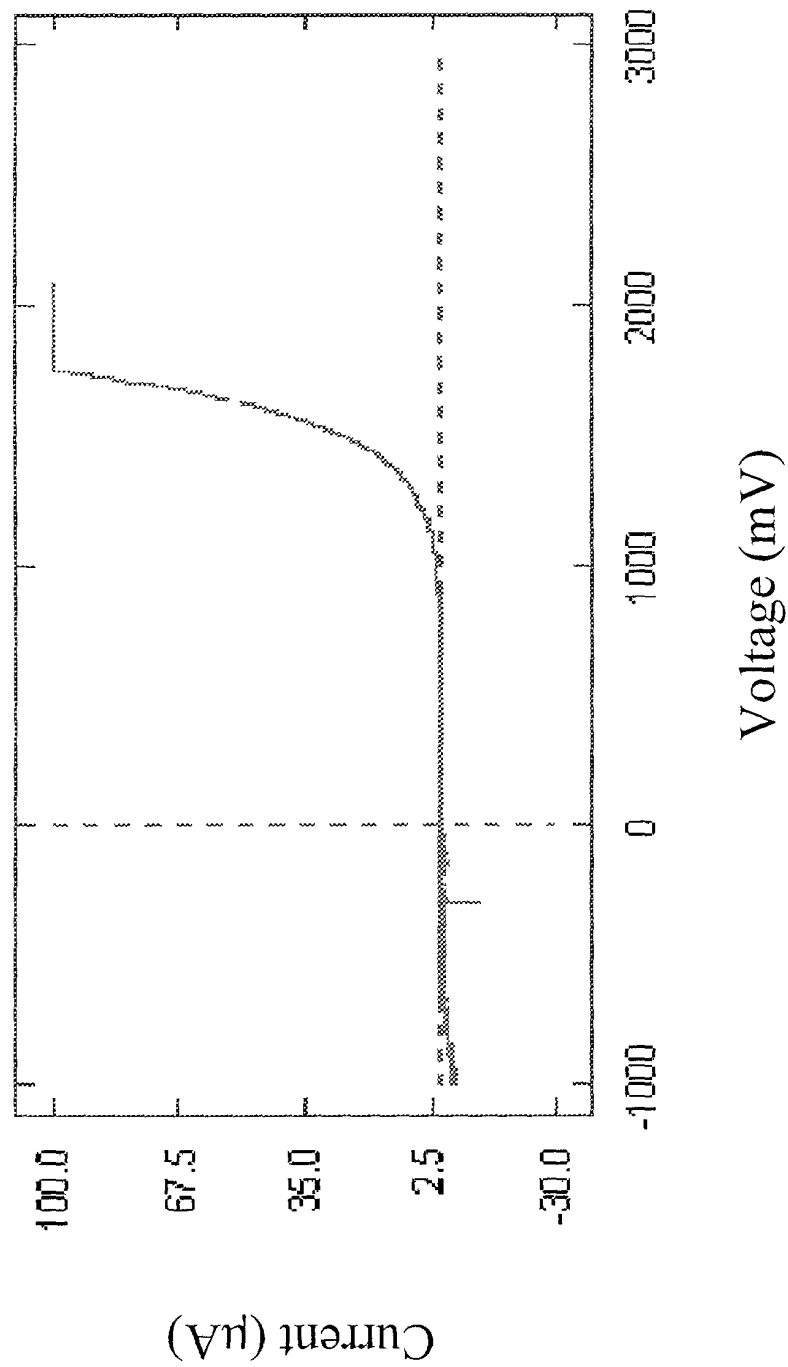


Figure 18

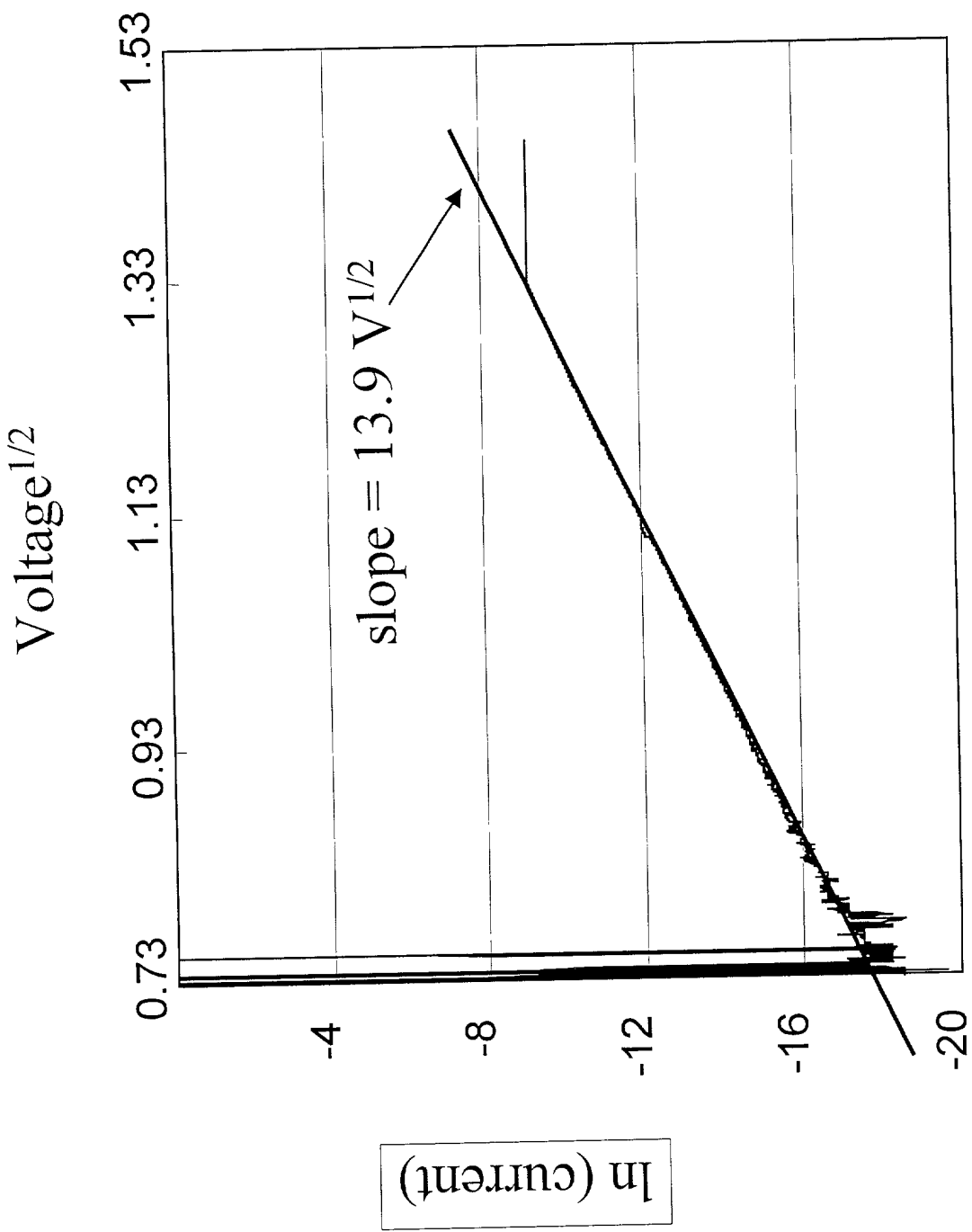


Figure 19

memory device based on molecular monolayer

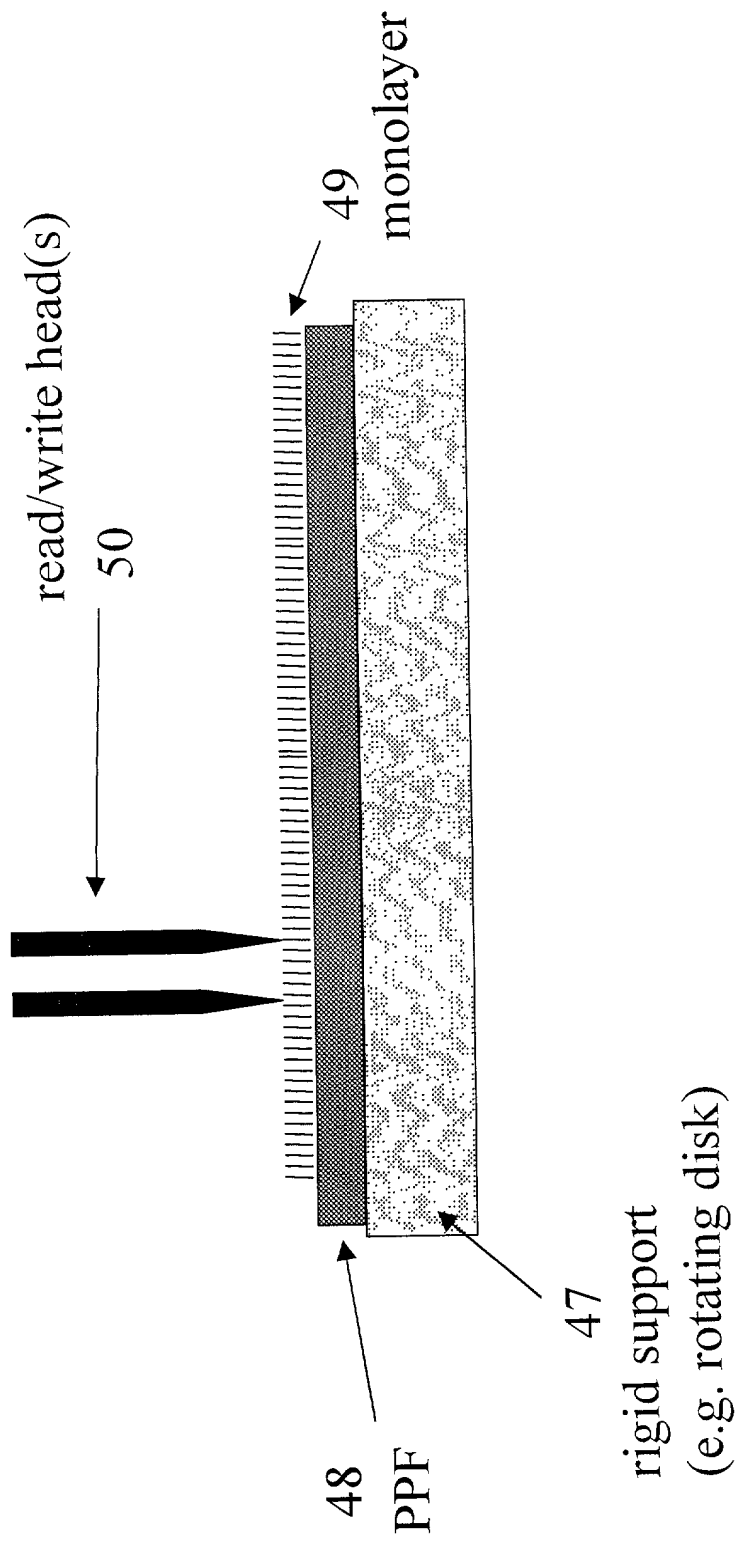


Figure 20

Flat panel display with monolayer field emitters:

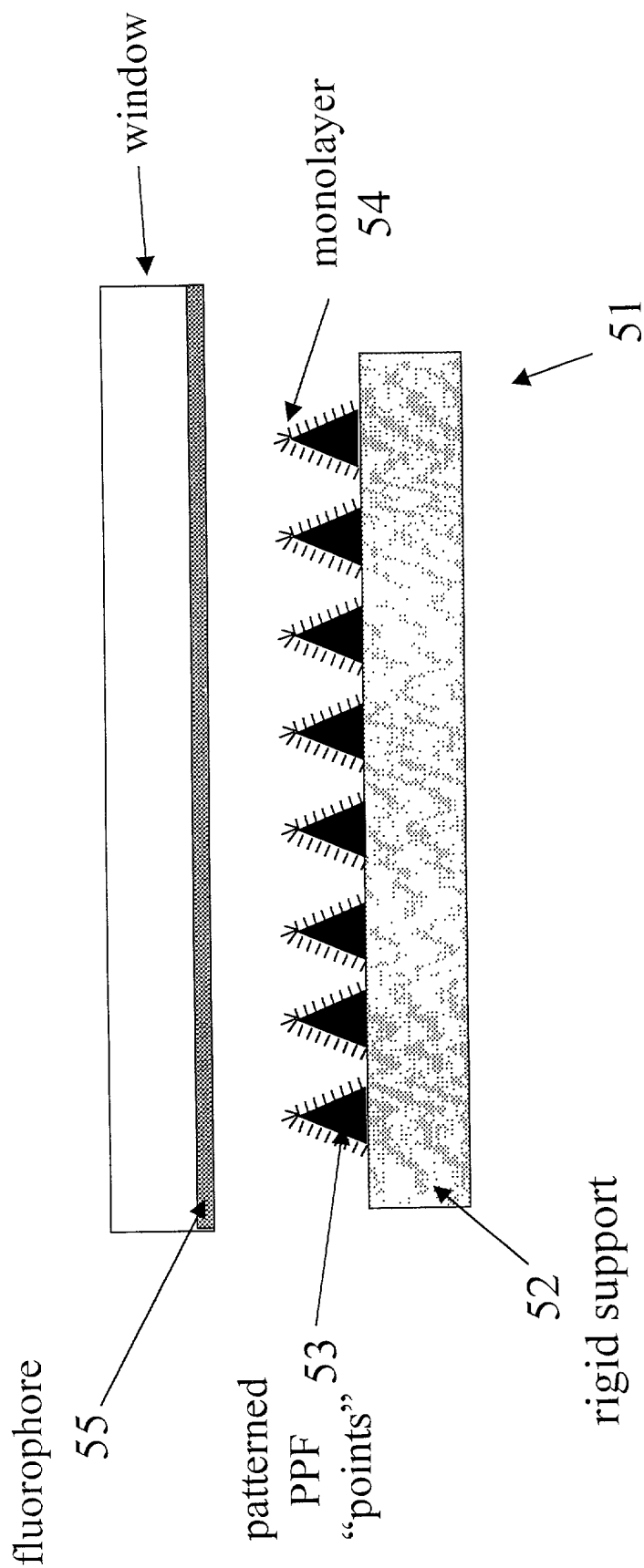


Figure 21